RESPONSE TO COMMENTS

REGARDING THE REISSUANCE OF THE FOLLOWING NPDES PERMIT

BROX INDUSTRIES, INC. MA0040177

Introduction:

The U.S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP) solicited public comments from January 23, 2007 through February 21, 2007 on the draft National Pollution Discharge Elimination System (NPDES) permit to be issued to Brox Industries, Inc.. During the public-notice (comment) period EPA-New England received comments from Cindy Delpapa of the Massachusetts Riverways Program.

In accordance with the provisions of 40 C.F.R. §124.17, this document presents EPA's responses to comments (RTC) received on the Draft NPDES Permit (MA0040177) and any changes made to the public noticed draft permit as a result of the comments. EPA's decision-making process has benefited from the various comments received and the additional information submitted. The information and arguments did not result in any substantial new changes to the permit. EPA did, however, improve certain requirements in the permit as a result of the comments raised. In addition, EPA noted an error in the permit which has been corrected. These improvements and/or corrections are summarized below and are reflected in the final permit. The analyses underlying these changes are explained in the responses to individual comments that follow.

Changes Made to the Final Permit as a Result of Public Comments

1. Added a reporting requirement for the maximum daily and monthly average loading of total suspended solids (TSS) in units of pounds per day (lbs/day).

2. Added a footnote explaining the calculation of TSS loading.

Corrections

3. The language in the Storm Water Pollution Prevention Plan (SWPPP) requirements (Part I.B.1.) has been modified from "but limited to…" to read "but *not* limited to…"

Comment No. 1

The drainage, water recycling and treatment train at this facility has many components and there are a few points which are not entirely clear. The fate of the runoff associated with the storage building containing the recycled petroleum contaminated soils stockpiles "which does not allow storm water discharge to any on-site point" is one. Is there any runoff associated with this storage building, and if so, is any runoff directed to an off-site collection system? If there is runoff, what is its fate?

Response No. 1

The storage building in which the recycled non-hazardous petroleum contaminated soil (PCS) stockpiles are located is enclosed by walls on three sides. The fourth side is open to allow trucks entrance to the building. The building is positioned on a high point such that storm water drains away from the building. In the case that storm water does enter the building, the floor is pitched towards the back wall to trap water inside the storage building. As indicated by Brox Industries, any water that accumulates in the building is absorbed by the soil or evaporates and no runoff is associated with the PCS.

Comment No. 2

The facility seems to be seasonally busy with more activity during the spring- summer months. Has consideration been given to increasing the monitoring frequency during this active period and reducing monitoring during the more dormant months at the plant? Dry summer months with their higher activity and likelihood of increased dust from the sand stockpiles and crushing/recycling processes seem likely to increase the potential for pollutants being carried into the drainage system. Summer is also the most biological active period for the receiving water/wetland thus it is important to completely understand the pollutant loads entering into the wetland.

Response No. 2

Historical data included as "Attachment B – Summary of Discharge Monitoring Reports" to the Fact Sheet shows no seasonal trends indicating higher concentrations of pollutants during the spring – summer months and lower concentrations during the fall – winter months. In addition, Brox Industries has maintained daily maximum and monthly average concentrations well below the numerical limits in the existing permit. Only one permit limit exceedance occurred at Brox from 2003 – 2006 (TSS concentration of 90 mg/l in November 2004), possibly due to a laboratory error. Based on the historical performance of the facility, EPA does not agree that an increased frequency of monitoring during the spring – summer months is necessary.

Comment No. 3

The flow daily maximum is to remain the same. We support as low a discharge volume as is possible given this facility is discharging to a wetland that essentially affords no dilution to the effluent. The flow limit is a maximum of 1,100 gpm which could potentially result in

1.585 mgd a day in to this wetland. We would like to encourage a daily maximum or at least a monthly average that reflects the pumping rate and the typical (4-6 hours per day) operating needs of this facility rather than a limitation that allows such a significant effluent volume. At 1.58 mgd, this discharge would be permitted to add more than 550 pounds of TSS in one day under the calculated and pro-rated TSS daily maximum concentration. This is a significant burden to a wetland resource area. If a flow limitation is not possible, we would advocate for a load limit for TSS that would be protective of the functions and values of the receiving wetland.

Response No. 3

EPA maintains that the current flow limitations are sufficiently stringent to protect water quality in the receiving water. The current flow requirements were designed to allow the facility to properly maintain its treatment ponds at volumes that will not overflow. The TSS daily maximum and monthly average concentrations were determined using best professional judgment (BPJ) based on the numerical limitations included in Sector D and Sector J of EPA's Storm Water Multi-Sector General Permit. These technology based limitations represent the treatment capabilities of the best TSS control technology and EPA believes the derived limits also protect water quality. Field investigations by both EPA and MassDEP conducted over the past three years have shown no evidence of accumulation of sediment. EPA does not agree that a load limit for TSS is necessary at this time. However, a reporting requirement for the daily maximum and monthly average TSS loading has been added to the Final Permit. EPA will monitor the results and will include load limits in the next permit issuance, if necessary.

Comment No. 4

A small amount of ammonia has been documented in the effluent from this facility. While it is unlikely the recorded ammonia will affect the Merrimack River, this discharge is to a wetland area offering no dilution for this discharge. We are pleased to see the monitoring requirement continue and would urge consideration be given to additional investigation of the impacts to the wetland ecosystem from the ammonia and other pollutants, (such as additional whole effluent toxicity testing) if the concentrations or loads increase or if there is some evidence of synergistic effects causing degradation to the wetland resource area.

Response No. 4

EPA disagrees that additional WET testing is necessary. EPA reviewed WET test results submitted by the facility in 2003 and detected no acute whole effluent toxicity (LC_{50}'s >100% effluent and A-NOEC 100%). A chronic toxicity evaluation was also conducted and exposures over both 6 and 7 days yielded C-NOEC of 100% and an LOEC of >100%. In addition, historical data from the facility shows only one incident of a measurable ammonia concentration from 2003-2006 (February 2005). EPA maintains that the permit requirements are sufficiently protective of the wetland resources. In accordance with the standard conditions of the permit (Part II.D.1.a.(2)), the facility must notify EPA if changes are anticipated that may result in increasing pollutant discharges that are not already limited in the permit.